Phase I Environmental Site Assessment

Douglas Block

Rocky Mount, Edgecombe County North Carolina

Prepared for:

Ms. Vanessa McCleary, Administrator City of Rocky Mount Community Development PO Box 1180 One Government Plaza Rocky Mount, NC 27802

Issued by:

Ed Aguirre & Associates, Inc. P.O. Box 6729 Raleigh, North Carolina 27628-6271 Project No. EA24-018

February 2004

(Electronic Signature)

Edward XI Ag .

Edward G Aguirre (for) Kari Lynn Lazenby Environmental Scientist (Electronic Signature)

Stephen Mark Brown, PG Senior Geologist

TABLE OF CONTENTS

Section	<u>Page</u>
Executive Summary	1
1.0 Introduction	2
2.0 Property Description	2
2.1 Site Description 2.2 Facility Operation 2.2.1 Utilities 2.3 Topography 2.4 Soils and Geology 2.5 Fill Materials 2.6 Groundwater Depth and Flow 2.7 On-site Wells 3.0 Surrounding Properties 3.1 Description of Surrounding Properties 3.2 Adjacent High Risk Sites 3.3 Wells in the Vicinity of the Subject Property 4.0 Historical Usage	
4.1 Interviews 4.2 Aerial Photograph Review 4.3 Chain of Title 5.0 Petroleum and Hazardous Materials	
5.1 Material Storage	5 5
6.1 Solid Waste	
7.1 Soil Contamination	7

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Page</u>
8.0 Surface and Storm Water	7
8.1 Surface Water on or near the Subject Property	7
8.2 Storm Water Discharge	
8.3 NPDES Permit	7
9.0 Regulatory Review	8
9.1 Environmental Database Review	8
9.2 Compliance Review	9
9.2.1 Air Quality	
10.0 Storage Tanks	9
10.1 On-site Storage Tanks	9
10.2 Off-site Storage Tanks	
11.0 Building Materials and Equipment Related Issues	
11.1 Asbestos Containing Materials	10
11.2 Lead-based Paint	
11.3 Lead in Drinking Water	10
11.4 Radon	
11.5 PCBs	10
11.6 Mold	11
11.5 Formaldehyde Foam Insulation	
12.0 Natural Resources	11
12.1 Wetlands	11
12.2 Endangered and Threatened Species	
13.0 Conclusions and Recommendations	11
13.1 Conclusions	11
13.2 Recommendations	
Figures:	
Figure 1 USGS Site Location	
Figure 2 Site Map	
Figure 3 2000 Aerial Photograph	
Figure 4 1957 Aerial Photograph	
Appendices:	
Appendix A Site Photographs	
Appendix B EDR-Transaction Screen Map Report	
Appendix C Deed Review	
Appendix D Recognized Environmental Concerns	

EXECUTIVE SUMMARY

The subject property consists of 42 abutting or adjacent tracts of land located in a three-block area on the Edgecombe County side of downtown Rocky Mount, NC. The property is located in a mixed commercial and residential area bounded on the west by NE Main Street and the Seaboard Coastline RR; on the north by E. Goldleaf Street; on the east by Atlantic Avenue; and on the south by E. Thomas Street. According to information provided by the City of Rocky Mount (City), this area referred to as "Douglas Block" was "the commercial center of the African American Community in Rocky Mount in the period 1920 through 1950." The City plans to redevelop the historic Douglas Block as part of the overall revitalization of the northern portion of the downtown area. Due to the number of tracts involved, the ESA is presented as one site (Douglas Block) with *recognized environmental concerns* (*RECs*) observed or suspected to be present on, adjacent to, or abutting the site listed in the ESA Appendix.

The Environmental Data Resources, Inc (EDR) Transaction Screen Map Report presents mapped sites with potential or existing environmental liabilities reported on local, state, and federal databases to be located within a one mile radius of the site. EDR reported 51 LUST (leaking underground storage tank) sites within a one half-mile radius of the site. This number is significant and raises concern for the subject property. One LUST site is located on the site (Tract #3850-71-6143) and two LUST sites are located adjacent to the subject property (north of the northeast corner of the property and east of the northeast corner of the property). EDR also listed two Hazardous Substance Disposal Sites (HSDS) located within one mile of the subject site. These HSDS sites do not present an immediate environmental concern to the subject property due to distance from the subject property.

Due to the age of the structures located on many of the tracts within the boundaries of the site, 26 of the 42 tracts should be surveyed for asbestos containing materials (ACM), lead paint, and lead alloy concerns before demolishing or renovating these structures. The improper use, storage, transport, and disposal of various commercial chemical and petroleum products typically associated with warehouses, heating and air conditioning supplies, mortuaries, and aboveground storage tanks are potential *RECs* present on the subject property. Although no information was readily available to confirm or deny that any of these products were improperly used, stored, or disposed on the subject site, a summary of <u>potential</u> *RECs* listed by Edgecombe County Tax Identification Number and property address is presented in Appendix D.

Ed Aguirre & Associates, Inc. recommend that, prior to purchase, demolition, or development, a Phase II Environmental Site Assessment be performed on those sites with *RECs* listed in Appendix D.

1.0 INTRODUCTION

At the request of Ms. Vanessa McCleary, Community Development Administrator for the City of Rocky Mount, North Carolina, representatives of Ed Aguirre & Associates, Inc. (EA) performed a Phase I Environmental Site Assessment on the 42 tracts of land located in Rocky Mount, North Carolina identified as "Douglas Block."

The principal objective of this assessment is to identify potential environmental liabilities associated with the present and historical use of the property, the physical condition of the grounds, the existing operational practices, and any impact from surrounding areas. The assessment consisted of an on-site inspection, discussion with available facility representatives, a review of pertinent regulatory agency files, and an evaluation of potential environmental liabilities.

During the assessment, EA personnel, trained to recognize both short and long-term actual and potential environmental hazards and liabilities, employed standard environmental investigation procedures. Although the assessment was thorough, the conclusions provided herein are based upon information provided to EA and are, therefore, no guarantee that additional problems will not arise in the future. EA did not perform asbestos, lead, radon, or any other intrusive environmental sampling or analysis during this assessment, but reviewed available data in the facility and regulatory agency files. EA does not provide any warranty for this property or certify future use of the property solely based upon this assessment. This assessment was generally conducted in accordance with ASTM 1527-00 "Standard Practice for Environmental Site Assessment Process."

2.0 PROPERTY DESCRIPTION

2.1 Site Description

The subject property consists of 42 abutting or adjacent tracts of land located in a three-block area on the Edgecombe County side of downtown Rocky Mount, North Carolina. The property is located in a mixed commercial and residential area bounded on the west by NE Main Street and the Seaboard Coastline Railroad; on the north by E. Goldleaf Street; on the east by Atlantic Avenue; and on the south by E. Thomas Street. The tracts are located in an urban downtown setting. Storm water is managed by curb and gutter along the roadside. Many of the buildings on the subject property were built between 1920 and 1960.

Appendix A contains selected photographs of the subject property.

2.2 Facility Operations

The subject property is currently a mixture of commercial and residential tracts. Current facility operations observed on the property during site reconnaissance include single- and multi-family dwellings, churches, mortuaries, small and mid-size commercial businesses, and warehouses. Several of the tracts were vacant or contained construction debris, apparently from recent demolition of the facilities.

2.2.1 Utilities

Electric service, municipal water, sewer service, and telephone service are all available to the subject property.

2.3 Topography

According to the contour elevations presented on the USGS Topographic Map - Rocky Mount Quadrangle, the topography of the subject property is relatively flat with an approximate elevation of 110 feet above mean sea level (MSL). The nearest stream or waterway is an unnamed intermittent stream located east of the subject property across Atlantic Avenue.

2.4 Soils and Geology

According to the *Soil Survey of Edgecombe County*, the near surface soils located on the subject property have been characterized as "urban land" soils. Urban land is a description applied to soils that have been modified by mixing, excavation, or backfill during construction activities. The areas include a moderate to high percentage of structural fill, structures, and impervious surface (parking lots, roads, etc.). According to the reference, almost all of the near surface soils in Rocky Mount have been modified, thereby creating urban soils. Slopes in urban soils range from 0% to 6%; engineering properties are modified at the site according to design plans on a case-by-case basis.

Because the subject property is located in the Coastal Plain Physiographic Province of North Carolina, the subsurface geology of the site consists primarily of Tertiary age sediments of the Yorktown Formation. The Yorktown formation in surface exposures consists largely of a mixture of inter-fingered beds of clay, sand, and shell marl. The predominant material is a blue-gray clay that varies from silica based to calcium based. At places, the clay contains interbedded lenses of sand and shell. As a result, subsurface conditions, including engineering properties and groundwater levels potentially can change dramatically within short distances.

2.5 Fill Materials

Fill placement is likely in the subject property's urban setting as a result of many years of diverse types of construction in the immediate area.

2.6 Groundwater Depth and Flow

The general depth to non-perched surfical groundwater in the vicinity of the subject property can be highly variable during the wetter months of the year; however, during the remainder of the year, groundwater is typically encountered at depths greater than 2.0 feet below the original ground surface, according to the *Soil Survey of Edgecombe County*. Surfical groundwater flow typically follows the surface of competent soil formations, which in turn generally runs parallel to surface topography. Locally, the surfical groundwater flow is to the east/northeast based on the USGS Topographic Map -Rocky Mount Quadrangle. Regionally, groundwater flow is to the east/southeast along the Tar- Pamlico River Basin.

2.7 On-site Wells

No water wells were observed on the subject property. Potable water is available from the City municipal water system.

3.0 SURROUNDING PROPERTIES

3.1 Description of Surrounding Properties

The subject property consists of 42 abutting or adjacent tracts of land located in a three-block area on the Edgecombe County side of downtown Rocky Mount, NC. The property is located in a mixed commercial and residential area bounded on the west by NE Main Street and the Seaboard Coastline Railroad; on the north by E. Goldleaf Street; on the east by Atlantic Avenue; and on the south by E. Thomas Street. The description of facility use on the surrounding properties is as follows:

• North textile mill, commercial buildings

Northeast residential

Northwest former tobacco warehouse located west of the rail road tracks

South Carolina Telephone, auto repair and detail shop

• Southeast automobile sales

• East automobile sales lot, single family homes, former gasoline station

West Seaboard Coastal railroad

3.2 Adjacent High Risk Sites

Based on a review of available environmental databases and the site reconnaissance, there is one moderate to high risk site located adjacent to the subject property located at 207 E. Goldleaf St. (textile mill site).

3.3 Wells in the Vicinity of the Subject Property

EA personnel did not observe any water supply wells in the vicinity of the subject property. One water tower was observed at the old tobacco warehouse planned for the new children's museum. EA personnel observed a monitor well on parcel # 3850-71-6272 also described as St. Johns African Methodist Episcopal Church at 250 Atlantic Ave. The purpose of the monitor well is unknown, although LUST sites are reported to be located across Atlantic Avenue to the East, adjacent to the South, and across Goldleaf Street to the North.

4.0 HISTORICAL USAGE

4.1 Interviews

Due to the number of tracts that comprise the subject property, interviews with current property owners or occupants were not conducted. It is our understanding from discussions with City representatives that Douglas Block was a thriving portion of the city in the 1950s.

4.2 Aerial Photograph Review

Two aerial photographs (aerials) were reviewed as part of this ESA. The first aerial reviewed, dated 1957, was purchased from the North Carolina Department of Transportation—Photogrammetry Unit, Raleigh, NC. A review of the subject site presented in the aerial indicates that most of the structures present on the site today were present at the time the aerial was recorded. Two large warehouses originally located between Main St. and Albemarle Ave. and several small structures that do not exist at present can be observed in the aerial.

The 2000 aerial photograph was available on the City GIS website. The warehouses, originally located between Main St. and Albemarle Ave., were visible in the aerial. The other structures present within the subject property appear much as they exist today.

4.3 Chain of Title

A review of property deeds is attached in Appendix C.

5.0 PETROLEUM AND HAZARDOUS MATERIALS

5.1 **Material Storage**

Heating oil above-ground storage tanks (ASTs) were observed on four tracts. Chemical storage associated with the funeral home facilities and the heating/air repair business were not observed during the site reconnaissance but are presumed to be present in small quantities.

5.2 Waste Storage

Although several of the tracts should be cleaned of haphazard dumping, permitted waste storage, other than standard containers, was not observed on the subject property.

6.0 WASTE DISPOSAL

6.1 Solid Waste

Residential solid waste is generated at the single-family homes and collected curbside by the municipal solid waste services. The commercial properties maintain small dumpsters. Several areas of haphazard dumping were noted on the subject property.

6.2 Recyclable Wastes

Containers used primarily for recycling of solid waste were not observed on the subject property during the site reconnaissance.

6.3 Wastewater

It is our understanding that all wastewater generated at the site is managed by the City utilities services.

6.4 On-Site Septic Systems

Although abandoned septic systems may still be present on the subject site, no septic systems were observed on the subject property during the site reconnaissance.

6.5 Hazardous Waste

No evidence of the generation, transport, storage, or disposal of materials typically characterized as hazardous waste was observed during the site visit.

6.6 Medical Waste

Medical and/or pathological waste may be generated by the funeral homes located within the subject property.

7.0 SPILLS AND RELEASES

7.1 Soil Contamination

Although not observed on every tract, visible evidence of surficial soil contamination was observed on several tracts during the site visit. Soil contamination is possible due to the historical use of petroleum products, herbicides, pesticides, and other chemicals associated with businesses located on various tracts of the subject property. As an example, a LUST site was identified at 240-246 Atlantic Avenue. EA personnel observed no records of any other spills or releases on the subject site.

7.2 Groundwater Contamination

A LUST site was identified at 240-246 Atlantic Avenue. According to the EDR report, although soil contamination was reported, the extent of groundwater contamination, if any, has not been assessed. Additionally, groundwater contamination is possible due to the high number of LUST sites located within a one half-mile radius of the subject property. Petroleum hydrocarbon contamination of groundwater could result from home heating oil stored in ASTs present on four of the tracts; chemicals including formaldehyde and phenol disposal operations at the mortuaries; metals, waste oil, and grease contamination from several small garages and automobile sales lots; and metals, pesticide, and herbicide contamination from the four tracts which previously contained warehouses.

7.3 Other Known Contamination

There is no evidence or report of contamination of any other media located on the subject site.

8.0 SURFACE AND STORM WATER

8.1 Surface Water on or near the Site

The nearest surface water is an intermittent stream located east of the subject property across Atlantic Avenue. A review of the USGS Topographic Map - Rocky Mount Quadrant indicates that the stream drains east-northeast eventually into the Tar River.

8.2 Storm Water Discharge

Storm water, flowing overland on the subject property, is directed by the City's curb and gutter system. The topography of the site is relatively flat, and the near surface soils consist of clayey sands which allow for relatively quick absorption of storm water. Determination of the percentage of impervious surface on the subject property was not part of this ESA.

8.3 NPDES Permit

There was no available evidence of any National Pollutant Discharge Elimination System (NPDES) permit or any state discharge permit having been issued for any of the tracts included in the subject property.

9.0 **REGULATORY REVIEW**

9.1 Environmental Database Review

As part of this assessment, EA personnel reviewed the following environmental databases, which were provided by the State of North Carolina. In addition, EA personnel reviewed information provided by EDR, Inc. (a subcontractor of EA) and made field observations of those sites/properties reported in order to assess the potential for an environmental impact to the subject property. In some instances, the search criteria used by EA may have exceeded the required ASTM search radius.

Information presented in the following table is listed according to the ASTM radius. In addition, sites are reported outside of the search radius if the specific site presents a significant potential for environmental impact.

Environmental	Distance	Number	Discussion
Record	Searched	Listed	
Federal NPL site	1 mile	0	None
list			
Federal CERCLIS	0.5 mile	0	None
list			
Federal CERCLIS	Adjacent	0	None
NFRAP site list			
Federal RCRA	1 mile	0	None
CORRACTS			
facilities list			
Federal RCRA	0.5 mile	0	None
non-CORRACTS			
TSD facilities list			
Federal RCRA	Adjacent	0	None
generators list			
Federal ERNS list	Property	0	None
State-equivalent	1 mile	2	Rocky Mount Coal Gas Plant No. 1
NPL			and No. 2 – these properties are listed
			as NC Hazardous Substance Disposal
			Sites- Due to distance from the
			subject property, it is not likely these
			properties will present an
			environmental concern to the subject
			property.
State-equivalent	0.5 mile	0	None
CERCLIS			
State Landfill	0.5 mile	0	None
State LUST	0.5 mile	51	Fifty-one LUST sites are located
			within the search radius (0.5 mi).
			One LUST site is located on the
			subject property on parcel # 3850-71-
			6143. Contamination from these
			properties present an environmental
			concern to the subject property soils
			and groundwater.
State UST	Adjacent	0	None

Approximate distances to the subject property presented in the text above may differ from those presented in the database reports. The distances presented in the text above were field verified upon conducting the field reconnaissance and represent the most accurate data.

Sites with incomplete address information are un-plottable based on the database review. Frequently, rural site are not plotted due to the nature of the address (e.g. Route 15, Box 225, etc.). An automobile reconnaissance was conducted within a 0.75 mile radius of the subject property in order to catalog property types that may harbor sites containing environmentally significant operations or conditions. This reconnaissance was cross-referenced with the un-plottable site list in order to determine if any un-plottable sites are within 0.25 miles of the subject property. No un-plottable sites were identified during the automobile reconnaissance or map review.

9.2 Compliance Review

No issues of environmental non-compliance or permit violation were noted during the record review or during the site reconnaissance.

9.2.1 Air Quality

There was no available evidence of toxic air contaminants at the subject property during the site visit. There was no available evidence of air quality problems associated with the subject property.

10.0 STORAGE TANKS

10.1 On-site Storage Tanks

ASTs were observed on four tracts during the site reconnaissance. Other ASTs may be present on other tracts but were obscured from view. It is also possible that underground storage tanks (USTs) are still be present on parcel # 3850-70-4588 from when it functioned as an automobile service station.

10.2 Off-site Storage Tanks

Several residential size ASTs were observed on surrounding properties during the site reconnaissance. Other ASTs and USTs may be present that were screened by vegetation and/or structures.

11.0 BUILDING AND EQUIPMENT RELATED ISSUES

11.1 Asbestos

Surveys conducted to identify asbestos containing materials (ACMs) were not a part of this assessment. Due to the age and type of the various structures observed on the subject property, it is possible ACMs are present in some of the structures' wall, ceiling, and pipe insulation, floor tiles and mastics, and exterior siding and shingles. Before proceeding with renovations or demolition, the buildings should be screened for asbestos. Structures with asbestos concerns are listed in Appendix D.

11.2 Lead-based Paint

No survey was conducted for lead-based paint as part of this assessment. Due to the age of multiple structures on the subject property, it is possible lead-based paint may be present. Interior and exterior painted surfaces in older structures should be screened for lead prior to disturbing the painted finish. Structures possibly containing lead-based paint are listed in Appendix D.

11.3 Lead in Drinking Water

No survey was conducted for lead in drinking water as part of this assessment. Due to the age of multiple structures on the subject property, pipes constructed of lead alloys may be present in many of the structures located on the subject property.

11.4 Radon

No survey was conducted for radon as part of this assessment. Radon is typically associated with metamorphic and igneous rocks. Because this site is located primarily in the Coastal Plain Physiographic Region, this area has been categorized by the EPA as Zone 3, which indicates radon to average less than 2 picoCuries/Liter (a very low risk).

11.5 **PCBs**

No survey was conducted for PCBs as part of this assessment. Many pole mounted transformers were observed along the property streets.

11.6 Mold

No survey was conducted for mold as part of this assessment. Due to the age and type of the various structures observed on the subject property, it is possible mold is present in some of the structures.

11.7 Formaldehyde Foam Insulation

No survey was conducted for formaldehyde foam as part of this assessment. Due to the age and type of the various structures observed on the subject property, it is possible formaldehyde foam is present in some of the structures.

12.0 NATURAL RESOURCES

12.1 Wetlands

A National Wetlands Inventory (NWI) Map, prepared by the U.S. Department of Interior's USFWS, was not available for review to determine whether the subject property lies within a mapped wetland area. However, no wetland type vegetation was observed during the site inspection.

12.2 Endangered and Threatened Species

No endangered or threatened species survey was warranted for this report.

13.0 CONCLUSIONS AND RECOMMENDATIONS

13.1 Conclusions

Representatives of Ed Aguirre & Associates, Inc. have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527 on the group of properties identified by the City as Douglas Block. This ESA has revealed no evidence of *recognized environmental conditions* in connection with the subject property except for the following, which indicate potentially environmentally significant issues:

- Structures located on 26 of the 42 sites are of the age and type that ACMs may be present.
- Structures located on 26 of the 42 sites are of the age and type that lead-based paint may be present.
- Structures located on 26 of the 42 sites are of the age and type that lead-alloy plumbing may be present.

- ASTs were observed on four of the tracts. Additional ASTs may be present on the site but
 were obscured at the time of the site visits. Soil and groundwater contamination may be
 present resulting from the improper use, transport, storage, and disposal of home heating oil.
- Several tracts located on the site served historically as garages or gasoline filling stations.
 Soil and groundwater contamination resulting from the improper use, transport, storage, and disposal of waste oil and grease, solvents, metals, and diesel-range hydrocarbons may be present.
- Several tracts located on the site served historically as warehouses. Soil and groundwater contamination resulting from the improper use, transport, storage, and disposal of waste oil and grease, solvents, metals, pesticides, and herbicides may be present.
- One tract located on the site serves as a heating, air conditioning, and ventilation service. Soil and groundwater contamination resulting from the improper use, transport, storage, and disposal of chemicals associated with this service may be present.

13.2 Recommendations

Ed Aguirre & Associates, Inc. recommends that Phase II Environmental Site Assessments be performed on those sites listed with recognized environmental concerns in Appendix D.

.